



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,040	11/29/2000	Toshikatsu Furunaga	Q62004	8611

7590 06/02/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

13  
EXAMINER

RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 06/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/725040

Applicant(s)

Examiner

Group Art Unit

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on Mar 10, 2003 (papers 11 & 12)
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 20-34 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 20-34 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1711

1. An RCE (paper 11) and an amendment (paper 12) have been filed on March 10, 2003.
2. Claims under examination now are 20-34.
3. All previous rejections of claim 1-16 are now moot since those claims are cancelled.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 21 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21, which depends from claim 20, is indefinite in reciting "said water-soluble soybean polysaccharide" since claim 20 does not encompass that polysaccharide.

Claim 24 is vague in reciting "an acrylic polymer" twice.

6. Claims 20 and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auhorn et al (USP 4908240).

Auhorn et al discloses an aqueous coating agent for paper consisting of (a) pigment, (b) a cationic aqueous polymer dispersion and (c) a surfactant (abstract). Water-soluble polysaccharides are used in admixture with cationic polymer by (replacing a part of that cationic polymer) (col. 7, lines 23-29). Cationic polymers are described in col. 2, line 46 to col. 5, line 7 and they read on those of instant claims 24-26. Suitable surfactants are described in col. 7, line 30 to col. 8, line 22. They read on

Art Unit: 1711

those of instant claims 27-30. Claimed ratios of cationic polymer to polysaccharide (of instant claims 31 and 32) are disclosed in col. 7 lines 23-26. Furthermore the claimed ratios of surfactant to polysaccharide (of instant claims 33 and 34) can be calculated from teachings in col. 2, lines 4-10 and in col. 7, line 23-24.

It would therefore have been obvious to follow teaching of this patentee and arrive at the claimed invention. Instant claims are directed to a method; but the only step in the method is coating or impregnating a paper. This step is quite well-known in the art of coating of paper.

7. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auhorn et al (USP 4908240) as applied to claim 20 above, and further in view of Yoshimura (USP 6171381) and JP 11279203.

(Yoshimura is cited in previous office actions).

Disclosure of Auhorn is presented earlier.

Auhorn fails to mention soybean polysaccharide of instant claims 21-23.

Disclosure of Yoshimura is summarized in earlier office action, paper 7, item 6. Applicants' comments on Yoshimura on pages 5-7 of paper 12 have been noted. It is true that Yoshimura uses soy polysaccharide together with natural polysaccharide and that they can be used as a binder. It is the examiner's position that instant claims being open-ended, do not preclude inclusion of natural polysaccharide. Additionally Auhorn, the primary reference uses polysaccharide (with cationic polymer) as a binder.

Art Unit: 1711

Yoshimura is relied upon for its disclosure of the use of soy polysaccharide or soy polysaccharide derivative in a coating composition such as an ink composition (see col. 3, lines 46-61).

JP '203 teaches desalination of soybean polysaccharide.

Therefore it would have been obvious to use in the coating agent of Auhorn, the soy polysaccharide (of Yoshimura), prepared by the desalination process (of JP '203) in order to enhance the stability of density of development of color.

8. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Auhorn et al (4908240).

Disclosure of Auhorn (above) proves that claim 20 lacks novelty.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to U.K. Rajguru whose telephone number is 703-308-3224. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

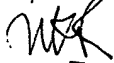
Application/Control Number: 09/725,040

Page 5

Art Unit: 1711

U. K. Rajguru/mn

May 30, 2003



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700